INCIDENT ACTION PLAN

MUCKAMUCK FIRE

Friday, September 10, 2021 0700-1900 Operational Period

PERCENT OF EFFORT

Ground	Daily	Approval			
DNR	%				
USFS	%				
BLM	%				

Air	Daily	Approval
DNR	%	
USFS	%	
BLM	%	



WA-COF-2290 221-KTR P6 N75D - 0621



Incident Objectives	1. Incident Name	2. Date Prepared	3. Time Prepared								
Incident Objectives	Muckamuck	9/9/2021	1800								
4. Operational Period (Date and T	ime)	•									
9/10/2021	0700-1900										
5. General Control Objectives for	5. General Control Objectives for the Incident (include Alternatives)										
• Implement risk management practices that provide for the safety of firefighters, other responders, and the public											
 Establish control line in areas where there is a high probability of success and ensure that firefighters exposures are commensurate with expected benefits. 											
 Conduct suppression repair damage to resources. 	activities in conjunction with re	esource advisors to preve	ent long term								
 Foster good relationships wi accurate and timely informa 	th local cooperators, stakeholo tion.	lers and the public by pr	oviding coordinated,								
 Keep cost commensurate with values at risk by working with local unit and coordinating with the Agency Administrators and Incident Business Advisor. 											
 Manage the human resources assigned to the fire in a manner that promotes a positive and harassment free work environment to strengthen relationships and team work. 											
 Utilize the Best Managemen fighters. 	t Practices to reduce the sprea	d of COVID-19 to the co	mmunity and fire								
6. Weather Forecast for Operatio	nal Period										
See attached weather foreca	ast.										
7. General Safety Message											
N.E.V	d public safety at all times. O and 18 by all incident personneratio for all fire line personner										
Aviation safety is high pri	ority. Assess the risk agains nnel understand emergency	t the benefit of the mi									
8. Attachments (check if attached)										
✓ Organization List (ICS 203) ✓ Weather ✓ Safety Message	☑ Assignment List (ICS 204)☑ Communication Plan (ICS 2☑ Medical Plan (ICS 206)										
9. Prepare	ed by (PSC)	10. Approved by (IC)									
ICS-202	\wedge										

ORGANIZATION ASSIG	NMENT LIST						
1. Incident Name	Muckamuck	9. OPERATIONS SEC	TION				
2. Date 9/9/2021	3. Time 1800	Field	Josh Tellessen				
4. Operational Period	9/10/2021 0700-1900	Planning	Shane Robson				
5. INCIDENT COMMANDER	& STAFF	b. Division C					
Incident Commander	Bill Dennstaedt	Division Supervisor	Tim Love				
Deputy Incident Commander	Jimmy Corvino	Deputy					
Safety Officer	Bob Schwiesow	d. Division F					
Information Officer	Don Malone	Division Supervisor	Doug Dodson				
6. AGENCY REPRESENTATIV	VE .	Deputy					
Agency	Name	d. Division X	d. Division X				
USFS AA	Kathy Johnson	Division Supervisor	Max Leyva				
DNR AA	Pat Ryan	Deputy					
BLM AREP	Chris Sheridan	d. Roads/Repair G	roup				
BOR AREP	Kendra Fallon	Division Supervisor	Brian Pratt				
Okanogan FD 9	Tim Tugaw	Deputy					
Okanogan DEM	Maurice Goodall	10. FINANCE SECTION	ON				
REAF	Mark Dean	Chief	Cari Richardson				
REAF	Matt Quinn	Deputy	Michelle Leonard				
7. PLANNING SECTION		Time Unit	Marcy Johnson				
Chief	Debbie Plummer	11. CONTACTS / OT	HER INFORMATION				
GISS (T)	Willa Zyskowski	NEWICC 509.685.690	O Fax 509.685.6918				
ITSS	Bradley Dilg						
8. LOGISTICS SECTION							
Chief	Matt Lougy						
Deputy	Mike Bucy						
Basecamp Manager	Mark Williams	Prepared by (Resource	Prepared by (Resource Unit Leader)				
Spike Camp Manager	Paul Footen	De	ebbie Plummer, PSC3				
Communications	Todd Bellfueille						

	DIVISION AS	SIGNMENT LI	1. Bra	1. Branch 2. Division / Group C						
3. Incide	ent Name	<u> </u>			4. Operation	onal Period				
	N	luckamuck			Da	te: 9/10/2 0	021	Tir	ne: 0700-1900	
5. Opera	ations Personnel	eri a garan eri halfishali are da				ne nedgojn				
Field O	perations	Jo.	sh Telless	en	Planning C		Shane Robson			
Safety	Officer	Вог	Schwies	ow	Division/G	roup Superviso	r		Tim Love	
6. Resou	rces Assigned this	Period					:			
RO#	Strike Team, Force/Reso		Lea	der	# People	Contact (phone, radio freq, etc.)		EMT	Remarks	
0110	Swedberg FMOD	Jam	es McKid	dy	2	•			LWD 9/13	
C-3002	Franco Reforestati	on HC2 Esec	quiel Tapi	а	20				LWD 9/16	
C-3003	North Columbia H	C2IA Dyla	n Cheste	r	16				LWD 9/24	
E-151	Chewack Wildfire	74 Gre	g Issac		3				LWD 9/23	
E-75	Fire Control T6	Pau	Fuchs		3				LWD 9/16	
E-77	Torch Fire T6	And	rew Gruz	in	3				LWD 9/15	
E-121	KL Farms T6	Jam	es Harter	,	3				LWD 9/10	
E-152	American Land Ser	vice T5 Chri	stian Ma	rtinson	3				LWD 9/17	
E-159	King Hydroseeding	WT2 Joe	lvie		1				LWD 9/20	
E-3039	H&H Enterprises V	/T2 Mai	Marc Anderson		1				LWD 9/23	
						-				
S-2	REMS Team	Coli	n Stenho	use	4			Ø	LWD 9/14	
			_						. "	
-					57					
7. Work	Assignments		- :							
2) Pat	ntinue to secure a trol and mop-up a									
8. Speci	al Instructions									
, ,	AD's will rove all c sources identified					· ·				
9. Comn	nunication Summa	у				•				
	Function	Name	Mode				Frequency			
		COMMAND 3 or 4	N			See Communica	ation Plan ICS2	205 for	<u>Details</u>	
<u> </u>	TACTICAL	TAC 5	N							
Propers	AIR	PRIMARY A/G	Appro	ved by (PSC)			Date:		Time:	
Prepared by (RESL)					oie Plumme				1800	

	DIVISION ASSIGNMENT LIST						2. Division /	Group	F
3. Incid	lent Name				4. Operation	onal Period			
	Mu	ckamuck			Date: 9/10/2021			Tir	ne: 0700-1900
5. Ope	rations Personnel	1 87 4 2 1 8 1 2					e te de la companya d		
Field	Operations	Josh	Tellessen		Planning Operations				Shane Robson
Safety	/ Officer	Bob S	Schwiesow		Division/G	roup Superviso	or		Doug Dodson
6. Reso	ources Assigned this Pe	eriod	N SA						The first man and the first state of the first stat
RO#	Strike Team/Ta Force/Resourc		I leader I # Pennie I " ' " I		EMT	Remarks			
E-157	Methow River Wildfin	re T4 Clayto	on Bell		3				LWD 9/14
E-158	S&L Services WT2	Dan F	uchser		1				LWD 9/11
									-
					1				
		_			4				
7. Woi	k Assignments								
2) Co	ontinue to patrol and pordinate with suppr		eeded, on	all firelin	nes that ca	n be accessed	by ground r	esour	ces.
8. Spe	cial Instructions	1 PA	1 177		· 			1111	i sat
2) Re	EAD's will rove all divesources identified fo					•			
9. Com	munication Summary	. : .							
	Function	Name	Mode				Frequency		
		MMAND 3 or 4	N			See Communic	ation Plan ICS	205 tor	Details
	TACTICAL P	TAC 6 PRIMARY A/G	N N			<u> </u>			
Prepar		MAIN AU		by (PSC)	·		Date:		Time:
Prepared by (RESL) Approved by (PSC) Debt					oie Plumme	9/9/202	21	1800	

	DIVISION ASSIGNMENT LIST						anch 2. Division / Group					
3. Incid	ent Name			•		4. Operation	onal Period					
		Muckamuck	(Da	te: 9/10/2	2021	Tir	ne:	0700-1900	
5. Oper	ations Personnel											
Field (Operations		Josh Telless	en		Planning O	perations		Shane Robson			
Safety Officer Bob Schwiesow						Division/G	roup Superviso	or		Max L	.eyva	
6. Reso	urces Assigned th	is Period		. 1								
RO#	Strike Team/Task	m/Task Force/Resource		ader		# People	Contact (phon etc	· ·	EMT		Remarks	
C-39	ASI Arden Inc. HC	:2	Ignacio Sarta	ana		20				LWD	9/15	
E-14	Hi Country T6		BJ Valdez	-		3				LWD 9	9/21	
E-150	Methow River W	ildfire T4	Jordi Hernar	ndez		3				LWD 9	9/17	
E-153	Liberty Wildfire T	6	Cliff Middlet	ton		3				LWD 9	9/16	
O-3023	EMTF		Rob Mulroo	ney		1			Ø	LWD 9	9/12	
				_			_					
						30	-					
7. Wor	k Assignments									-		
2) Co 3) Ide	entinue to secure fordinate with su entify and pull he	appression rep	air.		ent.							
8. Spec	ial Instructions											
	AD's will rove al sources identifie						=					
9. Comi	nunication Summ	nary	# 1.1 m	-								
	Function	Name	Mode					equency				
	OMMAND	COMMAND 3		<u> </u>		Sec	e Communicatio	n Plan ICS205	for Det	ails		
	TACTICAL AIR	TAC 7 PRIMARY A/	G N	-							·	
Prepare	d by (RESL)	PRIIVIANT A		oved by	(PSC)			Date:		Time:		

Debbie Plummer

1800

9/9/2021

DIVISION ASSIGNMENT LIST				1.	Branch		2. Division /	Group	Roads/Repair	
3. Incide	ent Name				4. Operation	onal Period				
	N	luckamuck	;			te: 9/10/2	021	Tir	ne: 0700-1900	
5. Oper	ations Personnel				1,515				The second secon	
Field C	perations		Josh Tellessen	Planning Operations					Shane Robson	
Safety	Officer		Bob Schwiesow	,	Division/G	roup Superviso	r	Brian Pratt		
6. Reso	urces Assigned th	s Period	ga vili — Marvillar Am			State of the state		tere . . t :		
RO#	Strike Tean Force/Res	-	Leader	•	# People	Contact (phone etc	-	EMT	Remarks	
0-106	REAF		Mark Dean		1	_			LWD 9/12	
0-123	HEQB (T)		Eric Weinke		1		·		LWD 9/15	
0-3009	REAF		Mike Quinn		1				LWD 9/14	
O-3035	HEQB (T)		Craig Heinema	nn	1				LWD 9/24	
0-	HEQB (T)		Jesse Connor		1				LWD 9/24	
E-131	Anderson Excava	tion EXCA2	Chris Anthrop		2				LWD 9/23	
E-3030	TJ's Mech Cutting	EXCA3	Courtney Kamı	ру	2				LWD 9/22	
E-3033	Rude Logging SKI)1	Keith Doughar	ty	2				LWD 9/22	
E-3034	McCuen Enterpri	se FEL2	Richard Elder		2				LWD 9/21	
				-	1					
		-								
					13					
7. Worl	Assignments				•					
2) Co	oritize repair wo ordinate work a		•	urrent	resources a	vailable.				
8. Spec	ial Instructions									
1 '	AD's will rove all sources identifie					•		ed.		
9. Comr	nunication Summ	ary							Aug.	
	Function	Name	Mode				Frequency			
	OMMAND	COMMAND	or 4 N			See Commun	ication Plan IC	S205 fc	or Details	
	TACTICAL	TAC 8	N							
Due: - : -	AIR	PRIMARY A		ad b / D4	<u> </u>		Data		Timo	
Prepared by (RESL) Approved by (PS					SC) bbio Blumm		Date:	21	Time:	

IAP Map

Muckamuck Fire WA-COF-2290 09/10/2021

13,298 acres at 09/09/2021



Legend

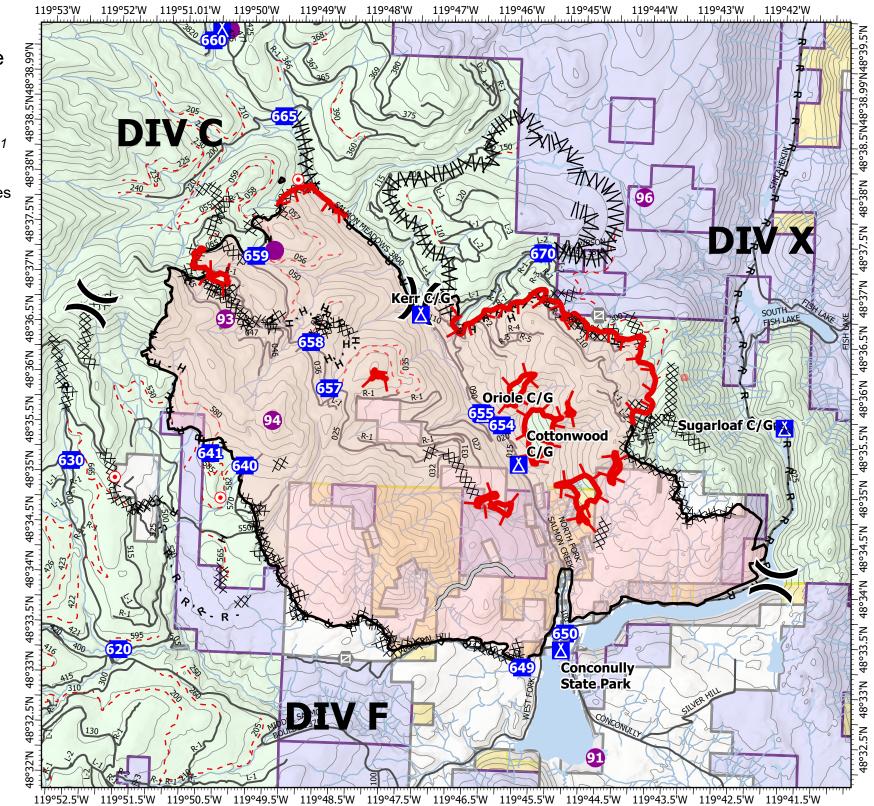
- Helispot
-)(Division Break
- Drop Point
- Camp
- Hot Spot Spot Fire
- Gate
- Fire Station
- Wildfire Daily Fire Perimeter
- Completed Dozer Line
- Completed Fuel Break
- H Completed Hand Line
- R Completed Road as Line
- Access or Improved Road
- Other
 - Fire Edge
- Contained Line
- U.S. Forest Service
 - Bureau of Land Management
 - Other Federal Land
- State Land
- Other Land, Including Private







WSZ 9/9/2021 1506 IR Flight North American 1983 Datum.



WEATHER

1. Incident Name

Muckamuck

2. Date Prepared

9/9/2021

3. Time Prepared

1800

DISCUSSION

A wet weather system will move into the region Friday. Am more confident of wetting rains east of the Okanogan Valley rather thanwest of the valley. You are right on the line between barely getting any rain and seeing a wetting rain. Otherwise cooler temps and higher humidities expected through the weekend. Humidities could lower again into the upper 20s to lower 30s Monday and Tuesday. Another system moves in Wednesday for higher humidities, a chance of precipitation and increased winds.

F	R	ı	n	Δ	٧
г	n		u	м	м

Sky/weather......Increasing clouds in the morning. Cloudy in the afternoon. Chance of rain showers in the afternoon.

CWR......25 percent.

LAL.....1.

Max temperature.....62.

Min humidity......48 percent.

Wind (20 ft)......Northerly winds 1 to 4 mph in the morning shifting to the south/southeast 4 to 8 mph in the afternoon. Gusts to 15 mph along the ridgelines in the afternoon.

Mixing height......Near surface in the morning increasing to 3500 ft AGL in the afternoon.

Transport winds.....Northwest 1 to 3 mph in the morning becoming east around 5 mph in the afternoon.

Haines Index......2 or very low potential for large plume dominated fire growth.

FRIDAY NIGHT

Sky/weather......Mostly cloudy. Slight chance of rain showers in the evening.

CWR.....5 percent.

LAL.....1.

Min temperature.....49.

Max humidity......75 percent.

Wind (20 ft)......South winds 6 to 10 mph in the evening becoming downslope downvalley 1 to 3 by midnight.

Mixing height......1500 ft AGL in the evening decreasing to near

the surface overnight.

Transport winds.....West 3 to 6 mph.

Haines Index......2 or very low potential for large plume dominated fire growth.

SATURDAY

Sky/weather.....Mostly sunny.

CWR.....0 percent.

LAL.....1.

Max temperature.....62.

Min humidity......42 percent.

Wind (20 ft)......Downslope/downvalley 1 to 3 mph early in the morning becoming upslope/upvalley 4 to 8 by 1100 PDT. Upslope/upvalley speeds 6 to 10 mph in the afternoon.

Mixing height......Near surface in the morning increasing to 4000 ft AGL in the afternoon.

Transport winds.....West around 5 mph.

Haines Index......2 or very low potential for large plume dominated fire growth.

9. Prepared by (Name and Position)

Debbie Plummer, PSC3

NC	IDENT RADIO COM	MMUNICATIONS P	LAN I-205	1. INCIDENT NAME			2. DATE/TIME PREF	ARED		3. OPERATIO	NAL PERIOD DATE/TIME	
				Muckamuck	Fire	Э	09/09/	2021		09/10/2021 DAYS		
_				4. BASI	C RAD	O CHANNEL	UTILIZATION			£		
;h #	Function	Channel Name	Assignment	RX Freq	N/W	RX Tone/NAC	TX Freq	N/W	TX Tone/NAC	Mode Analog (A) Digital (D) Mixed (M)	Remarks	
	COMMAND	FOREST ROCK	CMD	170.4750	N	146.2	164.9625	N	110.9	Α	FS RPTR ROCK	
	COMMAND	FOREST TUNK	CMD	170.4750	N	146.2	164.9625	N	141.3	Α	FS RPTR TUNK	
3	MUCK COMMAND	CMD 3	CMD	151.1375	N	136.5	159.4725	N	136.5	А	CMD 3 ON BUCK MNTN (LINKED)	
•	MUCK COMMAND	CMD 4	CMD	154.4525	N	136.5	158.7375	N	136.5	А	CMD 4 ON FUNK MNTN (LINKED)	
;	TAC	TAC 5	DIV C	154.2800	N	156.7	154.2800	N	156.7	А	DIVISION C *****	
3	TAC	TAC 6	DIV F	154.2650	N	156.7	154.2650	N	156.7	Α	DIVISION F *****	
,	TAC	TAC 7	DIV X	154.2950	N	156.7	154.2950	N	156.7	Α	DIVISION X *****	
3	TAC	TAC 8	R/R GRP	154.2725	N	156.7	154.2725	N	156.7	Α	ROADS AND REPAIR GROUP	
,	TAC	TAC 9		154.2875	N	156.7	154.2875	N	156.7	Α		
0	TAC	FS TAC	FS TAC	168.2000	N	0.0	168.2000	N	146.2	Α	FS TAC	
1	TAC	DNR COMM		151.4150	N	103.5	151.4150	N	103.5	Α	DNR COMMON	
2	TAC	DNR TAC1	TAC	151.3100	N	103.5	151.3100	N	103.5	Α	DNR TAC 1	
3	TAC	RED NET	TAC	153.8300	N	0.0	153.8300	N	156.7	Α	REDNET	
4	A/G	PRIMARY A/G	A/G	168.0125	N	0.0	168.0125	N	0.0	Α	Muckamuck Primary A/G	
5	A/G	A/G 3	A/G	166.6125	N	0.0	166.6125	N	0.0	Α	A/G 3	
6	AIRGUARD	AIRGUARD	EMERGENCY	168.6250	N	0.0	168.6250	N	110.9	Α	EMERGENCY USE	
S	pecial Instructions:				•		•	•			1 - 11	
. -	205 Prepared By: Co	mmunications Unit L	eader	Name:	Т	odd Bellef	euille COML		Signature	100	Welleh Il	
_									-			

Muckamuck USFS Fire Suppression Repair Standards

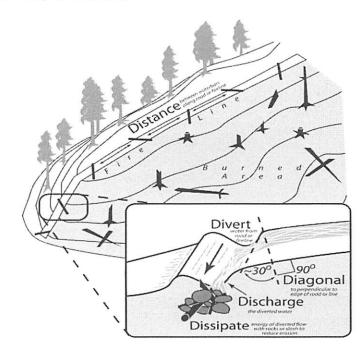
Objectives

The intent of the Suppression Repair Plan is to mitigate adverse effects to resources resulting from fire suppression activities on the Muckamuck Fire. Surface water/erosion control, maintenance of site productivity and the repair of high valued recreational sites are the focus of this work. Completion of this repair work is critical to reducing the impacts of erosion and sedimentation to minimize continued resource impacts.

Fire line repair - Hand line

- Hand crews will be used to implement water bars. No equipment will be used to install water bars.
- Pull berms and blend disturbed areas to fit the natural contours.
- Height of hand constructed water bars should average 12 inches. Use natural dips and rolls where possible.
- Place water bars on hand lines with the following general spacing guidelines, modify as needed to minimize soil erosion.
 - o < 15% 150' spacing (distance apart)</p>
 - o 15 to 30% slope 75' spacing
 - o 30% to 45% 50' spacing
 - > 45% slope 25' spacing
- Construct water bars at a 30 to 45-degree angle from the fire line, directing water away from the fire or other
 parts of the fire line. When feasible alternate directions of outlet.
- Pull soil, litter, duff and debris removed from the fire line back onto the line, to obliterate evidence of the line as much as possible. Strive for 65% to 85% ground cover. In grassy areas replace soil and sod and scatter rocks to naturalize the line location.
- Trenching should be filled in and the line restored to blend with the undisturbed soil contours.
- Block road access to hand lines to discourage recreational use, i.e. attempt to visually obscure junction of line and road and make travel on first section very inconvenient.

Water bars: the 5 Ds: "When locating and building water bars for all hand line and heavy equipment line, place them the right **Distance** apart, at a Diagonal to the fire line, so that they Divert, then Discharge, then **Dissipate** the energy of the flowing water. Be sure to make them deep enough so that they will be durable". *See diagram



<u>Fire line repair – Dozer line</u>

• Pull berms and blend disturbed areas to fit the natural contours – i.e. fully obliterate all dozer lines. Accomplishment of this specification is with use of an excavator (Type II or Type III preferred) with a 2 to 3 cubic yard bucket with an opposable thumb (rake is preferred), with capabilities of working on steep slopes (50 to 60%) and capable of having a 30 to 35 ft. reach. Do not use dozers for rehabbing fire lines.

- Compacted soils associated with suppression staging areas, helipads, and "intensively used" areas from suppression equipment should be de-compacted with an excavator bucket/rake to a depth of 12 to 18 inches (or less in the presence of underlying rock).
- Scatter branches, wood, rock, sod or other material to naturalize the fire line and prevent soil erosion. Hand
 crews may be used to augment scattering of wood debris/slash to naturalize the dozer line and prevent soil
 erosion.
- Hand crews may be used to construct water bars on slopes greater than 50% or in areas too hazardous for safe excavator operation, or in areas where excavator use may create additional surface disturbance.
- In areas designated for road or access re-closure, re-contour road prisms to original slope contours and/or construct closure structures (berms and/or boulders) to eliminate undesired vehicle access. Re-establish original road widths to no greater than 12 feet as approved or otherwise specified.
- Place water bars on dozer lines with the following general spacing guidelines, modify as needed to minimize soil
 erosion.
 - o 5 to 20% slope 120 to 150' spacing (distance apart)
 - o 21 to 34% slope 90' spacing
 - > 35% slope 80' spacing.
- Construct water bars at a 30 to 45-degree angle from the fire line. Directing water away from the fire or other parts of the fire line. When feasible alternate directions of outlet (see diagram on bottom of page 3).
- Water bars should be 12" to 18" high
- Water bars should be cut into the fire line do not simply push up loose soil.
- Provide an outlet for water on the downslope end of the water bar.
- Slash can be placed at the outlet of the water bar to disperse runoff
- Block access to dozer lines that leave from existing open roads using boulders or natural large woody material, to eliminate motorized access.
- Block road access to dozer lines to discourage vehicle and recreational use, i.e. attempt to visually obscure junction of line and road and make travel on first section very inconvenient.
- Fire lines through damp or wet areas/riparian zones need to be rehabbed by hand if possible, or by the lightest
 equipment possible, with the least number of stream crossings. If damage is minimal, consider the possibility of
 not doing additional work. Consult READ if needed for area specifics.

Fire line repair-Machine line using a Feller Buncher

- Trees cut of merchantable size along roads for suppression and/or contingency lines will be processed and decked. Non merchantable trees cut will be consolidated for disposal.
- Stumps will be cut to a height less than 1'. Stumps with a diameter less than 4" will be cut to a 6" height.
- Machine tracks will be blended to fit natural contours. Bare soil will be scattered with slash and/or seed.
- Ditches and culvert openings will be cleared of debris to ensure hydraulic capacity.
- Machine fuel breaks using a road will follow the appropriate road maintenance specifications.
- Machine fuel breaks using a dozer line will follow the appropriate dozer line repair specifications.

<u>Roads</u>

- Repair road damage incurred during incident suppression. Grade damaged roads.
- Pull berm on outside edge of road including side cast material back onto the grade surface.
 Clean drain ditches to restore rolling dip functions.
- Harden or restore existing drainage surfaces and structures (water bars, rolling grade dips, and natural drains) with dips or raised berms capable of facilitating existing traffic flows and vehicle types.
- Construct rolling grade dips or water bars as necessary to accelerate stabilization of road surfaces from suppression impacts of increased traffic levels.
- Clean culverts inlets/outlets with backhoe and/or hand crews as needed to maintain hydraulic capacity.
- In extreme dry climates or soil conditions, compaction of rolling grade dips may be difficult or impossible without the addition of water. Soil moisture conditions should be conductive toward compaction. Auxiliary

- equipment such as a water truck (with spray nozzle) may be needed to facilitate re-establishment of road conditions, which were degraded by suppression activities.
- Pile, chip, or end haul slash to designated disposal areas where determined necessary along roadside areas
 prepared as fuel breaks. Leave firewood material (logs too big to be chipped) stacked along roadsides for future
 use and removal.
- Re-close roads opened for fire suppression to current hydrologically stable as designated in site specific repair standards that follow.

Maintenance Level One Roads

- Start work at back end of road and proceed toward entrance.
- Block access to dozer line to prevent future vehicle use.
- Do not construct water-bars within cultural resource boundaries if such are present.
- Ensure stream crossings are open to allow water flow down the channel. Streams should match natural upstream and downstream gradient.
- Water bars ensure end is open and clear of obstructions.
- Water bar Angle 30-45°. Angle so water is carried from road cut bank to road shoulder. Ensure water bars intercept ditchlines.
- Water bar Height minimum 18" compacted berm.
- Depth Construct water bars so the bottom of the ditch is a minimum 6" into solid soil. Do not construct any
 water bars completely from loose soil.
- Construct Earthen Barrier at entrance of road. Construct 4-8' feet high. Incorporate slash with the soil when
 available. Generate barrier from material removed from the road prism behind the berm and from surrounding
 bank material as available. Material excavated from the road prism behind the barrier shall not exceed 2 feet in
 depth.
- Construct water bars every 100 feet on steeper road segments (8% grade or steeper), 200 feet on 4 to 6% grade, and every 300' on flatter ground (0 to 4% grade).
- Where there are drainages crossing the roads such as culverts, build water bars immediately downhill from these features. Connect water bars to road ditchline when ditchlines are present.
- Apply dry seed mix to road prisms being reclosed or decommissioned to provide competition with noxious weeds.

Maintenance Level 2 and above Roads

- Remove berms that exist on outside shoulder of roads to ensure road surface drainage.
- Clean drainage ditches when such have been impacted by fire suppression activities. Restore rolling dips if present.
- Harden or restore existing drainage surfaces and structures (water bars, rolling grade dips, natural drains, ditchlines and culvert catch basins) consistent with their pre-fire suppression construction and character.
- Construction of features such as drain dips may require watering to allow soil compaction.
- Some roads may require additional work and materials to repair suppression related use. Typical examples are-but not limited to—surface gravel replacement and asphalt patching. Resource Advisors will identify roads that
 need such additional repair.

General

- Chip, pile or disperse large concentrations of unburned fuels created during suppression efforts, or pile as requested by the unit.
- Identify and inventory fences, signs, and other improvements damaged by the incident.
- Remove garbage, litter, etc. (including cigarette butts) from control lines, roads, drop points, and staging areas and dispose off-site.
- Signs/flagging removal: All signs and flagging will be removed from fire lines, roads, drop points, staging areas, camps, and water chances. Leave only flagging in place which marks hazards, resource concerns, etc.

- Avoid unnecessary felling. In particular, avoid cutting trees and snags >21" dbh. Do not cut or damage any
 green non-hazardous trees anywhere within the fire area unless the tree has been specifically marked for felling
 by the repair team.
- Approved certified weed-free, local grass seed mix will be applied in the fall to all areas disturbed by suppression activities by the unit.
- All suppression features will be GPS'd and GIS files given to the home unit.
- Stock ponds used for drafting water will be brought back to pre-fire levels. These locations will be provided by the home unit.
- All drainages (intermittent and perennial), meadows, and springs remove all soil, slash, and other debris that has been pushed into these areas. Streams should match natural upstream and downstream conditions.
- All water drafting sites (streams and lakes) return area to pre-fire condition.
- Remove all supplies, equipment and trash not needed for contingency.
- Remove all shelter wrap and staples.

MUCKAMUCK MOP UP SPECIFICATIONS FOR DNR PROTECTED LANDS

Always consider over-head hazards prior to putting fire fighters in harm's way for mop up. Mitigate hazards and exposure as needed.

Achieve 100% mop-up along and inside the fire perimeter to a distance that is adequate to ensure the perimeter is secure to prevent the fire from escaping across existing containment lines.

To reduce hazards to firefighters during final mop-up, fall snags that pose "imminent" danger along all open roads within the fire perimeter.

Known spot fires outside the control lines will be 100% mopped up <u>where appropriate</u> to do so, a route to them will be flagged, and the perimeter of spots mapped in GIS.

Mop-up of partially burned areas further inside the lines will be determined on a case-by-case basis.

For structures and sensitive resources within the interior of the fire line, mop-up to a level to ensure that there will be no future effects from the fire.

As mop-up specifications are met on a Division, Operations will develop a plan for the resources and equipment to be left in place that may be required for future contingency actions.

Mop-up will be verified by aerial infrared equipment and/or gridded prior to fire turn back to Land Manager or Protecting Agency.

Notify Agency Representative if a cultural site is found during mop-up.

SUPPRESSION REHABILITATION STANDARDS FOR DNR PROTECTED LANDS

All Tractor and Hand Lines

- Place water bars on tractor and hand lines with the following spacing guidelines:
 - o 6-9% slope maximum of 300' apart
 - o 10-15% slope maximum of 200' apart
 - o 15-25% slope maximum of 100' apart
 - o 25% to 45% slope maximum of 50' apart
 - o Greater than 45% slope every 25-50'
 - **Spacing distances above should only be used as a guide. Use judgment in locating water bars to minimize soil erosion potential.
- Pull soil, litter, duff, and debris removed from the fire line back onto the line to cover non fire perimeter hand lines.
- Flatten large berms on all fire lines.
- Leave all freshly fallen trees as they lay. Do not limb or buck.
- Fire lines through damp or wet areas/riparian zones need to be rehabbed by hand if possible, or by the lightest equipment possible, with the least number of stream crossings. If damage is minimal, consider the possibility of not doing additional work.

- Block road access to hand and dozer lines to discourage recreational use. Attempt to visually obscure junction of line and road and make travel on first section very inconvenient (i.e. it will be too much trouble to access the line to be worth it, especially for motorcycles).
- Disperse large concentrations of unburned fuels created during suppression efforts.

Tractor Lines

- Tractor lines on slopes less than 40%:
 - Water bars may be installed by tractor or track mounted excavator. Use of excavator is preferred where berms need to be pulled in. Pile smaller debris and slash at the outlet of water bars.
 - Use only D-6 class or smaller tractors, 4 or 6 way blade preferred
 - o Install tractor or excavator water bars at a 20 to 30 degree angle to the fire line
 - o Height of bars on machines constructed water bars not to exceed 24".
 - o Rip areas of compacted soil.
- Tractor lines on slopes greater than 40%
 - o Install water bars by hand or with an excavator
 - o Install water bars at a 30 to 45 degree angle to the fire line.

Hand Lines

- Height of hand constructed water bars should average 12 inches. Soils in most of the burned areas are light and loose (pumice derived), making bars less than 12 inches much less effective. In heavier soils, bar heights of 8-12" are acceptable.
- For hand line rehab, construct water bars at a 45-degree angle from the line, directing water away from the fire or other parts of the fire line.

Trees and Felling Operations

- Leave all freshly fallen trees as they lay. Do not limb or buck.
- Avoid cutting trees and snags >20" dbh. Do not cut or damage any green non-hazardous trees
 anywhere within the fire area unless the tree has been specifically marked for felling by the
 rehab team. Large Trees are in short supply in the local area due to past fires.

General Rehabilitation Concerns

- Identify and inventory fences, signs, and other improvements damaged by the incident
- Repair road damage incurred during incident suppression.
- Remove garbage, litter, etc., from control lines, roads, drop points, and staging areas and dispose off-site.
- Signs/flagging removal: All signs and flagging will be removed from fire lines, roads, drop points, staging areas, camps, and water chances.

Incid	Incident Risk Assessment Worksheet				Name/Number Muckamuck	2. Location Conconully, WA			
	ldentification of H Assessr		sk	3. Name a	nd Title of Analyst Robert Schwiesow SOFR	4. Date Frid	ay, Septem	ber 10, 20	021
	5.	Pre-Control			Control or Abatement Action (Engineering, Administrative, PPE, Avoidance, Education, etc)		7. Post-Co	ontrol	
8. Location	9. Hazard 10. Hazard Probability Code 12. RAC (double-click in cell the		Actions (double-click in cell then click alt + enter to add a line)	13. Hazard 14. Severity Code 15		15. RAC	16. Acceptable (Yes/No)		
On Incident	Heavy Equipment Operations	Likely B	Catastrophic I	Critical	 Ensure communications are established with operators. Use hand signals if other communications are unavailable. Maintain a 50'-100' exclusion area around equipment and increase it to 1 1/2 times tree height when in timber. Use a spotter when backing. Avoid working below heavy equipment 	Occasional C	Catastrophic I	Serious	Yes
On Incident	Driving & Traffic	Likely B	Critical II	Serious	Practice "Defensive Driving" techniques traveling on all roads and city streets. Use spotters when backing. Honk horn to alert personnel when backing. Keep clutter off dash and inside cab. Follow Driving LCES (Lights, Chock blocks, Emergency brake, Seat belts. Always use headlights. Yield to pedestrians and bicycles. Observe posted speed limits. Use the 3 second rule for following distance when driving. Use chock blocks, turn wheels into hill. Avoid distractions (eating, cell phones, radio). Ensure that windshields are kept clean of dust and bugs.	Occasional C	Critical II	Moderate	Yes
On Incident	Unplanned Public Interaction	Likely B	Significant III	Moderate	- Be alert to non-fire personnel in areas with suppression personnel. - All non-fire personnel will be escorted while on fireline. - Post lookouts to in areas with public to avoid conflicts with mission tasks. - Ensure sufficient security to restrict access to exclusion area.	Rarely D	Catastrophic I	Moderate	Yes
On Incident	Hazard Trees	Likely B	Catastrophic I	Gritical	- Follow "Hazard Tree Safety" guidelines, IRPG page 22 Post lookouts, or use a spotter in mop-up areas with personnel Don't park vehicles or take breaks in high concentrations of hazard trees Establish trigger points for disengagement during high wind events Remember that the hazard zone extends a minimum of 2	Occasional C	Catastrophic I	Serious	Yes

Incident:	Date:	Shift:
Muckamuck	Friday September 10, 2021	Day



SAFETY MESSAGE SAFETY IS OUR FIRST PRIORITY



Fire fighter safety comes first on every fire, every time

PPE

FIRE FIGHTERS CODE OF CONDUCT

ATTITUDE

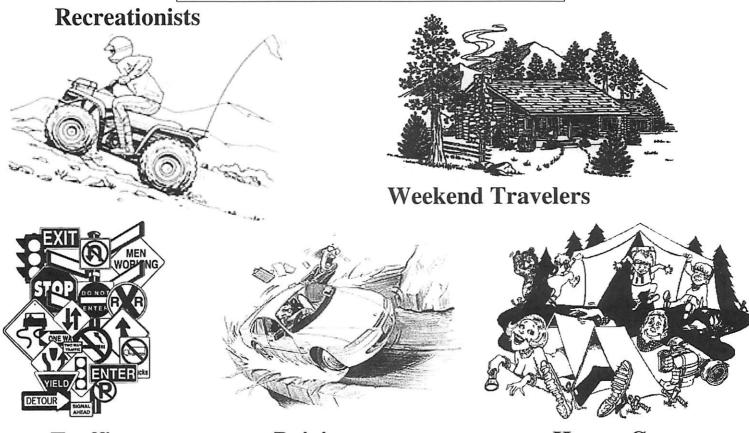
WORK-REST

Lookouts Communications Escape Routes Safety Zones

Make Sure LCES is in Place

Each firefighter must know the interconnection of LCES - lookouts, communications, escape routes, and safety zones. LCES should be established before fighting the fire: Select lookouts, set up a communications plan, choose escape routes, and select safety zones.

IT'S THE WEEKEND



Traffic

Driving

Happy Campers

MAJOR HAZARDS AND RISKS

- Fire Access Roads (sandy and loose) Slow Down
- Driving Long Distances.
- If you do not wear the proper PPE, you are at risk of being injured or killed
- Snags! Snags! Snags!
- Weather may limit aircraft use
- Highway Driving--Lights, Seatbelts, Windshields

Safety Officer, Robert A Schwiesow

HR Message	1. Incident Name	2. Date Prepared	3. Time Prepared	
	Muckamuck	9/9/2021	1800	

Inappropriate Behavior

It is extremely important that inappropriate behavior be recognized and dealt with prompty on any incident. Inappropriate behavior is all forms of harassment including sexual and racial harassment. Harassment in any form will not be tolerated. When you observe or hear of inappropriate behavior you should:

- Inform and educate subordinates of their rights and responsibilities. Tell the harasser to stop the offensive conduct.
- Provide support to the victim.
- Report the incident to your supervisor and the individual's supervisor, if the behavior continues. Disciplinary action may be necessary.
- Develop appropriate corrective measures.
- Document inappropriate behavior and report it to the appropriate incident manager or agency official.
- While working in and around private property, recognize and respect all private property.

Muckamuck Fire LOGISTICS INFORMATION

ICP: 0600-2200

SHOWERS: Conconully Camp: 0600 to 2200

ICP: 0600 to 2200

Showers are closed 1200-1400 at both camps.

MEALS: Conconully Camp: 0600 to 0800 and 1915 to 2115

ICP: 0600-0900 and 1800-2100

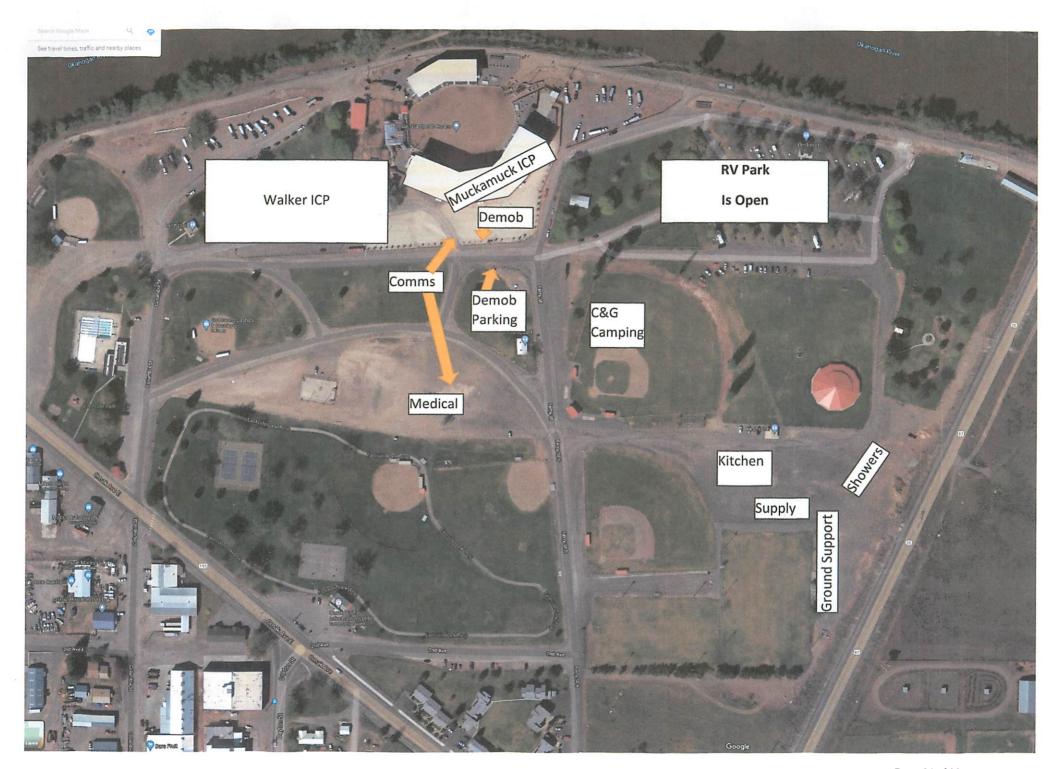
All hours are subject to change at both locations.

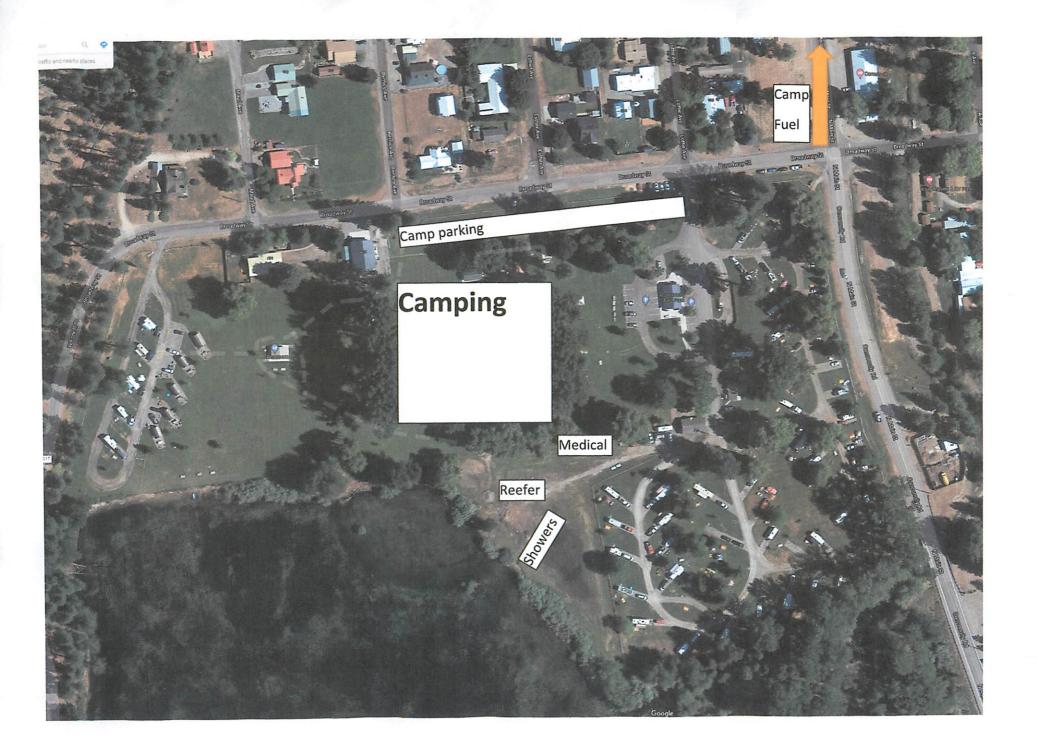
SUPPLY ORDERING: Please get those to C&G staff during briefing. Also, they can be turned in to Division Supervisors and Operations.

- There is a map for added information.
- Please keep vehicle speeds down through fire camp, ICP, and local roads.
- If you need assistance after hours, please contact Mike Bucy from Logistics: 509-953-3189.
- Masks must be worn inside & outside at camp and in vehicles with others.
- All lunches will be at the reefer. Camp crew will assist you in handing out ice and lunches. Water and sports drinks will be at the reefer as well. Try and send as few people as possible to pick up supplies.
- Cell service is set up for Verizon and AT&T. T-Mobile has Wi-Fi. If your phone has Wi-fi calling enabled, it will work with any system. Each cellular system has a limited amount of users at one time. Please be patient and courteous.

Network: DNR2021Guest Password: Emergency2@

 The RV park at each site is still active with visitors. Please be cognizant of their actions and yours.









Fire Information Resources

Resource Logo	Weblink	QR Code
FOREST SERVICE USAS FOREST SERVICE	https://www.facebook.com/colvillenf	
NORTHEAST WASHINGTON INTERAGENCY Type 3 Incident Management Team	https://www.facebook.com/newimt3	
InciWeb - Incident Information System	https://inciweb.nwcg.gov/incident/7786/	

Muckamuck Finance Information

WA-COF-2290 P6N75D-0621 221-KTR

NEIMT Team 2 Finance Contact Information:

Cari Richardson, FSC3, 509-936-3563 Michelle Leonard, FSC3(T), 509-640-8716

Please continue to submit all documents electronically to incident finance email: 2021.muckamuck.finance@firenet.gov

All email transmissions shall include in the subject line:

- ➤ Resource Number
- **▶** Resource Name
- > Type of document being emailed (example: CTR, ST Shift Ticket, Agreement, etc.)

CTRs and Shift Tickets MUST be signed by your incident supervisor

There will be a collection box available for shift tickets and CTRs at Conconully State Park after briefing each morning.

Starting 9/7/2021, all resources assigned to the Muckamuck incident will demob in person at Muckamuck ICP at the Omak Stampede Grounds. Please be sure you have all time submitted (CTRs and shift tickets MUST be signed by incident supervisor).

MUCKAMUCK DEMOB SCHEDULE

SATURDAY, SEPTEMBER 11 E-121	KL FARMS (T6)	0700
SUNDAY, SEPTEMBER 12 E-373	S&L SERVICES (WT2)	0700
MONDAY, SEPTEMBER 13 O-810	ROB MULROONEY (EMTF)	0730
WEDNESDAY, SEPTEMBER 15		
E-157	METHOW RIVER WILDFIRE (T4)	0700
S-2	REMS TEAM	0730
THURSDAY, SEPTEMBER 16		
C-39	ASI ARDEN INC (HC2)	0700
E-77	TORCH FIRE (T6)	0730
FRIDAY, SEPTEMBER 17		
C-3002	FRANCO REFORESTATION (HC2)	0700
E-75	FIRE CONTROL (T6)	0730
E-153	LIBERTY WILDFIRE (T6)	0800
SATURDAY, SEPTEMBER 18		
E-150	METHOW RIVER WILDFIRE (T4)	0700
E-152	AMERICAN LAND SERVICE (T5)	0730

COVID-19 Exposure Risk

COVID-19 is spread mainly from person to person. Spread occurs more commonly between people who are in close contact (within about 6 feet for a total of 15 minutes or more over a 24-hour period) with one another through respiratory droplets that come from the mouth or nose when an infected person coughs, sneezes, sings, or speaks. COVID-19 can be spread by people who are not showing symptoms or before their symptoms begin.

COVID-19 is spread in three main ways:

- 1. Breathing in air when close to an infected person exhaling small droplets and particles containing the virus. Spread that occurs by breathing in air that contains the virus when you are not in close contact is uncommon but occurs more often in enclosed spaces with poor ventilation (airflow) and when you are exposed for a longer period of time.
- 2. Having small droplets and particles containing the virus land in the eyes, nose, or mouth, especially through splashes and sprays like a cough or sneeze.
- 3. Touching the eyes, nose, or mouth with hands that have the virus on them. It is also uncommon for COVID-19 to spread through contact with contaminated surfaces. This means that you are unlikely to get COVID-19 by touching your eyes, nose, or mouth after touching a contaminated item

Close contact means:

- Being within 6 feet of a person who has COVID-19 for a total of 15 minutes or more over a 24-hour period, or
- Having direct exposure to respiratory secretions (e.g., being coughed or sneezed on, sharing a drinking glass or utensils, kissing), or
- · Caring for a person who has COVID-19, or
- Living with a person who has COVID-19

For more information visit www.cdc.gov

WILDLAND FIRE COVID-19 SCREENING TOOL

Today or in the past 24 hours, have you had any of the following symptoms¹?

Symptom									
Cough more that	n expected?								
Shortness of bre	ath or difficul	ty breathing	g?						
Fever? Chills?									
Muscle pain, out	tside your non	mal for fire	fighting?						
Sore throat?	Sore throat?								
New loss of tasto	New loss of taste or smell?								
Fatigue, outside	Fatigue, outside your normal for firefighting?								
Headache, outsid	de your norma	al for firefig	hting?						
Congestion or ru	ınny nose, out	side your n	ormal for fire	efighting?					
Nausea or vomit	ting								
Diarrhea									
* Take temperat	ure with no-to	uch thermo	meter, if ava	ilable *					

Instructions for Screening

Item	What to Do
If resource has a cough that is more than expected, shortness of breath or difficulty breathing, or any other symptoms listed.	DO NOT MOBILIZE
At Entries:	DO NOT ANNOUNCE
Consider adequate number of personnel needed for screening. Although medical personnel are ideal, screeners do not have to be medically trained.	Ask individual to step aside and follow the steps below.
If resource has cough, shortness of breath or difficulty breathing, or any other listed symptoms including fever (over 100.4) at entry.	

Steps to follow						
Escort symptom	atic individu	al to isolatio	n area.			
Isolation suppor	t personnel s	should begin	documentat	ion.		
Have symptoma	tic individua	al contact Sup	pervisor for	further direc	tion.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Notify public he	alth officials	3.				
Have individual	transported	as appropriat	te.			
Protect and secu Information (PH	•	cted Personal	Identifiabl	e Information	n (PII) or Pe	rsonal Health

¹ Symptoms of Coronavirus

https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html

ACTIVITY LOG (ICS 214)

1. Incident Name: 2			2. Operational Period:		
				Time From	m: Time To:
3. Name: 4.		4. IC	S Position:		5. Home Agency (and Unit):
6. Resources Assig					
Nan			ICS Position		Home Agency (and Unit)
				·	
7. Activity Log:					
Date/Time	Notable Activities				
	-				
		-			
					
	_				
				_	
	1				
8. Prepared by: Na	ame:				Signature:
ICS 214, Page 1		Date/Time:			

MEDICAL PLAN (ICS 206 WF)

1. Incident/Project Name					2. Operational Period					
Muckamuck					Date/Time 09/10/2021 0700-1900					
3. Ambulance Serv	ices			.14						
Name Complete Address				ldress				Advanced Life Yes	ed Life Support (ALS) es No	
Lifeline Omak, WA						Command 911 (secondary) X			x	
4. Air Ambulance S	ervices			_						
Name			Phone			•	Type o	f Aircr	aft & Capabil	ity
Life Flight: Brewster (30 min)	, WA	_	command (second				Cri	tical A	ir Transport	
Airlift NW: Wenatche	ee, WA	C	Command (second	d			Cri	tical A	ir Transport	
5. Hospitals										
Name Complete Address	Degree DD°	Datum – W rdinate Star es Decimal I MM.MMM' N M.MMM' W	ndard Minutes I - Lat	Trave Air	l Time Gnd	Phone		ipad No	' I of Care	
Three Rivers	Lat:	48° 06.	37 N	25	50		Х		Level 4 Tr	
Hospital 507 Hospital Way	Long .	119° 46.97 W min min 509-645	509-645-							
Brewster, WA	VHF: 155.340 3300									
Mid Valley	Lat:	48° 23.		15	25		х		Level 4 Tr	auma
Hospital 310 Jasmine St	Long:	119° 32.79 W	min	min	min	509-429- 0922				
Omak, WA	VHF:	155.340								
Central Washington Hospital 1201 Miller St Wenatchee, WA	Lat: Long : VHF:	47° 24. 120° 19 155.340	.27 W	30 min	150 min	509-662- 1511	х		Level 2/3 Trauma	
Harborview	Lat:	47° 36.		60	320		Х		Level 1 Tr	auma and burn
Medical Center 325 9th Ave	Long :	121° 19	0.30 W	min	min	206-744- 4074			center	
Seattle, WA 6. Division Bra	VHF:	155.340								
Group		Capa				Personnel			10 10 10 10 10 10 10 10 10 10 10 10 10 1	
Division C (Muckar		Medic	Team W	liaerne	ess 	Colin Sten	nouse		·	
Division F (Muckamuck) Division X (Muckamuck) EMTF						Dah Mulua			·	
Field Incide See COVID	ent With plan for	in an Inci r COVID r	elated ir	ncident	s.	Rob Mulrocated on the	incide			nnel.
ICP Incident Within an Incident can be Prepared By (Medical Unit Leader) 8. Date/Tin								10. Date/Time		
Leager)						Robert A. Schwiesow			09/09/21 1800	

ICS 206 WF (1/14) Page 29 of 30

MEDICAL PLAN (ICS 206 WF)

Controlled Unclassified Information//Basic

Medical Incident Report

FOR A NON-EMERGENCY INCIDENT, WORK THROUGH CHAIN OF COMMAND TO REPORT AND TRANSPORT INJURED PERSONNEL AS NECESSARY.

FOR A MEDICAL EMERGENCY: IDENTIFY ON SCENE INCIDENT COMMANDER BY NAME AND POSITION AND ANNOUNCE "MEDICAL EMERGENCY" TO INITIATE RESPONSE FROM IMT COMMUNICATIONS/DISPATCH.

lise the following items to communicate situation to communications/dispatch.

. CONTACT CO		DISPATC	H (Verify correct frequ			munications/dispaten.
Ex: "Commun!	ATUS: Provide incide	nt summary riority patier	(including number of party and including number of party and inclu	atients) and command by a falling tree. Requ	structure. esting air ambulance to	Forest Road 1 at (Lat./Long.) This will be the Trout
	rgency / Transport lority	Ex: Uni YELLO Ex: Sign GREEN	conscious, difficulty brea	athing, bleeding seven rious Injury or illne to walk, 2° — 3° burns i or Injury or illness.	ely, 2° – 3° bums more to	
	ijury or illness & sm of injury					Brief Summary of Injury or Illness (Ex: Unconscious, Struck by Falling Tree)
Transpo	rt Request					Air Ambulance / Short Haul/Hoist Ground Ambulance / Other
Patient	Location			-	,	Descriptive Location & Lat. / Long. (WGS84)
Incide	nt Name					Geographic Name + "Medical" (Ex: Trout Meadow Medical)
On-Scene Inci	dent Commander					Name of on-scene IC of Incident within an Incident (Ex: TFLD Jones)
Patie	nt Care					Name of Care Provider (Ex: EMT Smith)
. INITIAL PATI	ENT ASSESSMENT	: Complete t	his section for each patier	nt as applicable (start wi	th the most severe patien	0
Patient Assessm	ent: See IRPG page	106				
Treatment:						
. TRANSPORT						
Evacuation Loca	tion (<i>if different</i>): (<i>De</i>	escriptive L	ocation (drop point, i	ntersection, etc.) or	Lat. / Long.) Patier	t's ETA to Evacuation Location:
lelispot / Extract	ion Site Size and Ha	ezards:				-
. ADDITIONAL	RESCURCES / EQU	IPMENT I	NEEDS:	-		
Example: Paramed	lic/EMT, Crews, Immobi	ilization Dev	ices, AED, Oxygen, Tra	uma Bag, IV/Fluid(s), a	Splints, Rope rescue, W	heeled litter, HAZMAT, Extrication
. COMMUNICA			und EMS Frequenc			ble
Function	Channel Name/Num	ber	Receive (RX)	Tone/NAC *	Transmit (TX)	Tone/NAC *
COMMAND						
AIR-TO-GRND						
TACTICAL						
'. CONTINGENC ihead.	Ys <u>Considerations:</u> h	f primary o	ptions fail, what action	s can be implemente	d in conjunction with p	orimary evacuation method? Be thinking
. ADDITIONAL	INFORMATION: Upo	dates/Chang	es, etc.			-

REMEMBER: Confirm ETA's of resources ordered. Act according to your level of training. Be Alert. Keep Calm. Think Clearly. Act Decisively.